

Remarks

I. Status of the Application and Claims

As originally filed, this application had a total of 18 claims. In this Amendment, Applicants have cancelled claim 18 without prejudice. Thus, claims 1-17 are presently pending in this application.

II. The Amendments

Claims 1-12 were amended to incorporate the features previously recited in cancelled claim 18. Additionally, claim 12 was redrafted into independent form. These amendments do not add new matter, and therefore, their entry is respectfully requested.

The Rejections

On page 3 of the Office Action, at point 4, claims 1-18 are rejected under 35 U.S.C. § 103(a) over Mangold, *et al.*, U.S. Patent No. 6,328,944 in view of Cochrane, U.S. Patent No. 5,116,535. The Examiner alleges that Mangold, *et al.* discloses various doped, pyrogenically prepared oxides. On page 4 of the Office Action, the Examiner further alleges that Cochrane discloses aqueous dispersions of fumed silica, and asserts that it would have been obvious to combine the disclosures of the two references.

Applicants respectfully submit that Mangold, *et al.* may not be used to make this rejection. Mangold, *et al.* qualifies as prior art only under the provisions of 35 U.S.C. § 102(e), and the invention disclosed in this patent application and Mangold, *et al.* were both owned by Degussa AG at the time that this invention was made. Therefore, under the provisions of 35 U.S.C. § 103(c), Mangold, *et al.* may not be used to make an obviousness rejection, and thus, the rejection should technically be withdrawn. However, Applicants realize that a foreign equivalent reference (such as Canadian Published Application No. 2,223,377) might be cited as prior art under 35 U.S.C. §§ 102(a) or (b), and thus, Applicants will address the merits of the rejection below.

Applicants respectfully traverse this rejection.

As amended, independent claim 1 recites “a coating mixture for an inkjet paper or inkjet film.” Independent claim 12 recites a process for producing such a coating mixture. Applicants submit that regardless of what the cited references may disclose, neither reference discloses or suggests a coating mixture for an inkjet paper or inkjet film comprising a doped, pyrogenic oxide or a process for producing such a composition.

Furthermore, Applicants have discovered that coating mixtures according to claims 1-17 have unexpectedly superior printing properties when used in inkjet printing papers or films, as compared to films with coating mixtures containing undoped pyrogenic oxides. As shown in Table 4 on page 4 of the present specification, films using doped pyrogenic oxide mixtures according to claims 1-17 scored better in comparative tests than films having a coating mixture including OX 50, a comparable undoped pyrogenic oxide. In particular, films using coating mixtures according to claims 1-17 experienced significantly less bleeding than those using the comparable prior art coating mixture.

Because neither of the references discloses or suggests a coating mixture for inkjet paper or inkjet film, or a method for producing such a coating mixture, and because coating mixtures according to claims 1-17 have unexpectedly superior properties when used on inkjet papers and films, Applicants submit that claims 1-17 are not rendered obvious by the cited references. Accordingly, Applicants respectfully request that the rejection be withdrawn.

Conclusion

In view of the amendments and remarks above, it is believed that the present application is in condition for immediate allowance. Early and favorable notice to this effect is earnestly solicited.

If, in the opinion of the Examiner, a phone call may help to expedite the prosecution of this application, the Examiner is invited to call Applicants' undersigned representatives.

Respectfully submitted,
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Appendix

Marked Up Version of Amendments Showing Changes Made

Claims 1-12 were amended in the present application. Below, each amended claim is shown with text that was added being underlined and text removed being bracketed.

1. (Amended) A coating mixture for an inkjet paper or inkjet film comprising a dispersion, the dispersion comprising a liquid phase and a solid phase, wherein the solid phase comprises a pyrogenic oxide, and wherein said pyrogenic oxide:

- a) is doped with one or more doping components; and
- b) has a BET surface area of between 5 and 600 m²/g.

2. (Amended) The [dispersion] coating mixture of claim 1, wherein said pyrogenic oxide is silica.

3. (Amended) The [dispersion] coating mixture of claim 1, wherein said liquid phase is water.

4. (Amended) The [dispersion] coating mixture of any one of claims 1-3, wherein said pyrogenic oxide is prepared by the method of flame hydrolysis or flame oxidation.

5. (Amended) The [dispersion] coating mixture of any one of claims 1-3, wherein said pyrogenic oxide is doped using an aerosol.

6. (Amended) The [dispersion] coating mixture of any one of claims 1-3, wherein said pyrogenic oxide is doped with aluminum oxide.

7. (Amended) The [dispersion] coating mixture of any one of claims 1-3, wherein the amount of doped material in said pyrogenic oxide is between 1 and 200,000 ppm.

8. (Amended) The [dispersion] coating mixture of claim 6, wherein the amount of doped material in said pyrogenic oxide is between 1 and 200,000 ppm.

9. (Amended) The [dispersion] coating mixture of claim 8, wherein said doped material is applied as a salt or a salt mixture.

10. (Amended) The [dispersion] coating mixture of any one of claims 1-3, wherein the solid phase in the dispersion is present in a proportion by weight of between 0.001 and 80 wt.%.

11. (Amended) The [dispersion] coating mixture of claim 6, wherein the solid phase in the dispersion is present in a proportion by weight of between 0.001 and 80 wt.%.

12. (Amended) A process for preparing a [dispersion] coating mixture for an inkjet paper or inkjet film [according to claim 1,] comprising:

- a) mixing a doped pyrogenic oxide having a BET surface area of between 5 and 600 m²/g with a liquid; and
- b) milling the mixture produced in step a).